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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,923	06/19/2003	Eric B. Hochberg	ASRC-1	1872
1054	7590	12/29/2004	EXAMINER	
LEONARD TACHNER, A PROFESSIONAL LAW CORPORATION 17961 SKY PARK CIRCLE, SUITE 38-E IRVINE, CA 92614			COCKS, JOSIAH C	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/601,923	Applicant(s) HOCHBERG ET AL.	
	Examiner Josiah Cocks	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Receipt of applicant's amendment filed 10/4/2004 is acknowledged.

### ***Drawings***

2. The drawings were received on 10/04/2004. These drawings are not approved by the examiner. The changes to the actual content of the drawings is acceptable, however, applicant has not included the label "Replacement Sheet" in the page header as required by 37 CFR 1.84(c). Applicant should submit a replacement sheet that is appropriately labeled. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,071,017 to Russell, JR. et al. ("Russell") (cited by applicant).

Russell discloses a solar energy concentrator as described in applicant's claims 18 and 20 including a parabolic trough having a reflector shaped by a plurality of tensioned string/wire pairs (59) extending along each trough (see Fig. 1), each pair having respective strings positioned

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on opposed surfaces of the reflector (see Fig. 13) and includes plastic sleeves (see col. 10, lines 1-16). The reflector is a membrane and is made of a Mylar film (see col. 10, line 5) and the strings are not regarded as putting significant tension on this film. In Russell, the trough formed by the plurality of strings/wires is continuous in the same manner as disclosed and claimed by applicant.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 19, 21-25, and 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell as applied to claims 18 and 20 above in view of U.S. Patent No. 5,365,920 to Lechner ("Lechner").

Russell discloses all the limitations of claims 19, 21-25, and 1-17 except for a transparent tubular housing enclosing the reflector wherein the housing includes endplates and is pressurized above external atmospheric pressure, and the means for rotating the housing to receive incident sunlight.

In regard to claims 10 and 24, OFFICIAL NOTICE is taken that carbon fiber is known material for metal string or wire. It would have been obvious to a person of ordinary skill in the art to select a material such as carbon fiber for the wire/string of Russell and is not regarded as patentably distinct.

Lechner teaches a solar energy concentrator in the same field of endeavor as Russell wherein the concentrator of Lechner includes a transparent tubular housing (1) with endplates (see Figs. 2a-2c) wherein the housing includes a gas that provides an internal pressure that is higher than atmospheric pressure (see col. 2, lines 15-21). Therefore, the examiner considers that the endplates are hermetically sealed to the housing. The examiner also considers that when *Russell* is modified to include the tubular housing of Lechner the elevated pressure would partially contribute to the tension of the strings/wires. Lechner also discloses means (11) for rotating the housing to track the position of the sun (see col. 3, lines 22-25).

Therefore, in regard to claims 19, 21-25, and 1-17, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the solar concentrator of Russell to incorporate the housing of Lechner as this housing desirably follow

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the path of the sun and yields a high efficiency (see Lechner, col. 3, lines 22-25 and col. 4, lines 39-45).

***Allowable Subject Matter***

8. Claims 26 and 27 are allowed.

***Response to Arguments***

9. Applicant's arguments filed 10/4/2004 regarding claims 1-25 have been fully considered but they are not persuasive. Applicant asserts that his invention is an improvement over the prior art exemplified by Russell. However, applicant does not present any arguments as to the structure appearing in applicant's claims is not present in Russell or Russell in view of Lechner. As noted in the claim rejections above, the examiner considers that all of the structural limitations of claims 1-25 are present in the prior art.

In regard to claims 26 and 27, applicant's arguments as to how these claims are distinct from the prior art are persuasive. These claims have been indicated to be allowable.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus, can be reached at (571) 272-4877. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Any questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

jcc  
December 20, 2004

  
JOSIAH COCKS  
PRIMARY EXAMINER  
ART UNIT 3749